

Portfolio Software

December 17, 2015

For more information regarding how to access software from Los Alamos, contact the Software Team at (505) 665-9090 or software@lanl.gov.

End User License Agreements (EULA)

These software tools are available through **EULAs**.

- <u>KIVA</u>The KIVA family of Computational Fluid Dynamics (CFD) software predicts complex fuel and air flows as well as ignition, combustion, and pollutant-formation processes in engines.
- NJOY2010 NJOY2012The NJOY Nuclear Data Processing System is a comprehensive computer code package for producing pointwise and multigroup cross sections and related quantities from evaluated nuclear data in the ENDF format, including the latest US library.
- PARMILAParmila version 2 is an ion linac particle dynamics code.

Executable Downloads

FCI deploys "lite" versions of software users can download with a single click. These downloads are more basic versions designed to provide users with a trial of the software. Selected executable software is available as proprietary source code that can be licensed for a fee.

- <u>FEHM (Finite Element Heat and Mass Transfer Code)</u>FEHM is used to simulate groundwater and contaminant flow and transport in deep and shallow, fractured and unfractured porous media throughout the US DOE complex.
- <u>Improvements to MARFA Code (released as MARFA version 3.2.3)</u> The software will be used to assess long-term migration of radioactive material and other contaminants beneath the surface of the Earth.
- <u>POISSON/SUPERFISH</u>Poisson Superfish is a collection of programs for calculating static magnetic and electric fields and radio-frequency electromagnetic fields in either 2-D Cartesian coordinates or axially symmetric cylindrical coordinates.
- RAVEGRID RaveGrid (Raster to Vector Graphics for Image Data) version 2.5* is an image vectorization and image segmentation application that takes your raster images and turns them into smaller, editable vector images in the SVG format.
- <u>RELIC</u>The RELIC software package allows the user to calculate intermediate-coupling wavefunctions, energy levels, transition strengths (Judd-Ofelt theory), and radiative decay properties of tri-positive lanthanide ions in solids.

- <u>Seismoacoustic Software</u>Addressing local and regional-scale seismological and infrasound problems through a combination of theory, data analysis and field deployments in support of United States treaty/explosion monitoring.
- <u>SEQSTRAP</u>SEQSTRAP iteratively extrapolates partial length nucleic acid sequences based on comparisons with similar, overlapping sequences.
- <u>SEQUEDEX</u>Sequedex classifies DNA sequences by analyzing collections of sequences in new ways.
- Total-Variation Regularized Numerical Differentiation, Version 1.0
- <u>Trident Compiler</u>Trident is a compiler for floating point algorithms written in C, producing circuits in reconfigurable logic that exploit the parallelism available in the input description.

Mobile Apps

Los Alamos offers free mobile apps on Google Play and the App Store.

 \times

RICHARD P. FEYNMAN CENTER FOR INNOVATION

www.lanl.gov/feynmancenter | (505) 667-9090 | feynmancenter@lanl.gov